

12/03/2008

In the Specification:

Please amend the specification as follows:

Please replace the paragraph starting on page 7, line 24, and extending to page 7, line 28, corresponding to paragraph [0011] of the corresponding United States Published Patent Application 2007/0071629 A1 as follows:

-- This object and other objects are achieved with a double screw compressor of ~~the kind indicated in the preamble to claim 1, which double screw compressor has the features indicated in the characterizing part of patent claim 1~~ comprising two interacting rotors for compressing the gas and a toothed gearing, which toothed gearing comprises a housing with two opposite end walls which are made of a first material, two parallel gearwheel shafts which are each connected to one of the rotors and mounted rotatably in the opposite end walls with a nominal center distance, two interacting gearwheels which are fixed on a respective gearwheel shaft and made of a second material, each gearwheel having involute teeth corresponding to one another and designed so as, when engagement between teeth on their respective wheels takes place, to form a nominal backlash between the teeth interacting during the engagement when the gearwheel shafts are located at the nominal center distance from one another, and further having a nominal pressure angle, the first and second materials having different thermal expansion coefficients, characterized in that each of the gearwheels comprises the same nominal pressure angle which is smaller than 15° in order to minimize the deviation of the actual backlash from the nominal backlash when a center distance deviates from the nominal center distance as a consequence of a change in temperature of one of the parts included in the screw compressor.--

Please replace the paragraph starting on page 6, line 21, and extending to page 6, line 28, corresponding to paragraph [0015] of the corresponding United States Published Patent Application 2007/0071629 A1 as follows:

-- Another object is to provide a method of, in such a double screw compressor, reducing the negative effect variations in the operating temperatures have on the functioning of the double-screw compressor. The method ~~according to the invention is defined in independent claim 7, and further characteristics and advantages of the method emerge from the dependent claims 8-12, in a double-screw compressor for~~

supplying gas to a gas consumer reducing the effect of temperature variations of parts in the double-screw compressor on the functioning of the double-screw compressor, which double-screw compressor comprises two interacting rotors for compressing the gas and a toothed gearing, where the toothed gearing is designed with (1) a housing with two opposite end walls which are made of a first material, (2) two parallel gearwheel shafts, which are each connected to one of the rotors and mounted rotatably in the opposite end walls with a nominal center distance, and (3) two interacting gearwheels which are fixed on a respective gearwheel shaft and made of a second material, each gearwheel having involute teeth corresponding to one another designed so as, when engagement between teeth on their respective wheels takes place, to form a nominal backlash between the teeth interacting during the engagement when the gearwheel shafts are located at the nominal center distance from one another, and further having a nominal pressure angle, the first and second materials are selected so that they have different thermal expansion coefficients, characterized in that the nominal pressure angle of each of the gearwheels is identical and within the same range 0° to 15° in order to minimize the deviation of the actual backlash from the nominal backlash when a center distance deviates from the nominal center distance as a consequence of a change in temperature of one of the parts included in the screw compressor. --